

**REMARKS**

**I. Introduction**

This response is being filed in response to the Final Office Action dated August 16, 2007.

For the following reasons the application should be allowed, and the case passed to issue.

If this application is not allowed, Applicants submit this response should be entered upon filing an appeal, as it reduces the issues for appeal.

Claims 2-26 are pending in this application. Claims 3-7, 15-17 and 20-26 were withdrawn following a restriction requirement. Claims 2, 11-14 and 18 were rejected under 35 U.S.C. § 102(b) and claims 8-10 and 12 were rejected under 35 U.S.C. § 103(a).

**II. Claim Rejections under 35 U.S.C. § 102(b)**

**A. Japanese patent publication 10-110,887**

Claims 2, 11, 13, 14, and 18 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Japanese patent document 10-110,887 (the '887 publication). Claim 2 recites:

A vacuum heat insulator comprising a gas barrier enveloping member having a heat seal layer, and a flat core member,

wherein said core member is evacuated and sealed within the enveloping member, said enveloping member having mutually facing heat seal layers,

wherein the enveloping member is heated and pressed in a portion where said core member is present within the enveloping member, and at portions of said enveloping member where said core member is not present within the enveloping member, and

wherein the portions of said heat seal layer where said core member is not present within the enveloping member are closely attached to each other and heated and fused so as to be along the core member shape at the border between the portion where the core member is present within the enveloping member and the portion where the core member is not present.

Anticipation under 35 U.S.C. § 102 requires that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”

*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed Cir. 1987). At a minimum, the cited prior art does not disclose (expressly or inherently) that the **enveloping member is heated and pressed in a portion where said core member is present within the enveloping member, and at portions of said enveloping member where said core member is not present within the enveloping member.**

The Examiner refers to Figure 1 of the ‘887 publication and alleges that the reference discloses a vacuum heat insulator comprising a gas barrier envelope with a heat sealable layer wherein the envelope covers a flat core member and is heat-sealed around the core member.

However, as can be seen from Figure 1 of the reference, core material 2 is bordered on each side by covering materials 3. It is clear from the ‘887 publication that there is no disclosure of an enveloping member that is heated and pressed in a portion where the core member is present within the enveloping member and at portions of the enveloping member where the **core member is not present within the enveloping member.**

Furthermore, claim 2 recites that “the portions of the heat seal layer where the core member is not present within the enveloping member are closely attached to each other and heated and fused so as to be along the core member shape at the border between the portion where the core member is present within the enveloping member and the portion where the **core member is not present.**”

The apparatus disclosed in ‘887 does not teach any area where portions of the heat seal layer are closely attached to each other so as to be along the core member shape at the border

between the portion where the core member is present within the enveloping member and the portion where the core member is not present.

As such, the claim is not anticipated by the '887 publication.

The Examiner contends that the terms "heated", "pressed", "cut off" and "cut off by melting down" as used in the claims are process limitations that do not add any distinguishing features. Applicants respectfully disagree. However, claim 2 is sufficiently different from the prior art independent of the alleged process limitation terms. As discussed above, the '887 publication does not disclose areas where the core member is not present, and wherein the heat seal layers are closely attached to each other in these areas so as to be along the core member shape at the border between the portion where the core member is present within the enveloping member and the portion where the core member is not present.

As such claim 2 is allowable as the '887 publication fails to disclose all of the elements of the claim.

Claims 11, 13, 14 and 18 are also allowable over the prior art as they depend from claim 2 and further distinguish the invention.

**B. Stroobants U.S. 6,322,743**

Claims 2, 11-14 and 18 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Stroobants U.S. 6,322,743 (Stroobants). As discussed above in reference to the '887 publication, claim 2 recites in pertinent part that "the enveloping member is heated and pressed in a portion where said core member is present within the enveloping member, and at portions of the enveloping member where the core member is not present within the enveloping member wherein the portions of the heat seal layer where the core member is not present within the enveloping member are closely attached to each other and heated and fused so as to be along

the core member shape at the border between the portion where the core member is present within the enveloping member and the portion where the core member is not present.”

The Examiner contends that Stroobants discloses an envelope that covers and is fused to a flat core member. However like the ‘887 patent, Stroobants also does not disclose that portions of the envelope member where the core member is not present are attached to one another along the core member shape at the border between the portion where the core member is present within the enveloping member and the portion where the core member is not present.

As such claim 2 is allowable as Stroobants fails to disclose all of the elements of the claim.

Claims 11-14 and 18 are also allowable over the prior art as they depend from claim 2 and further distinguish the invention.

### **III. Claim Rejections under 35 U.S.C. § 103(a)**

Claim 19 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over either the ‘887 publication or Stroobants. Applicants respectfully disagree.

As discussed above, neither the ‘887 publication or Stroobants either alone or in combination disclose all of the elements of independent claim 2, from which 19 depends.

Therefore claim 19 is also allowable.

Claims 8-10 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over either Stroobants or the ‘887 publication in view of Japanese publication 08-303686 (the ‘686 publication).

As an initial matter, claims 8-10 depend from and further distinguish claim 2. As discussed above, neither Stroobants nor the ‘887 publication disclose all of the elements of claim 2, either alone or in combination.

Therefore, dependent claims 8-10 are also allowable.

Moreover, in order to establish a *prima facie* obviousness rejection under 35 U.S.C. § 103(a), all the claim limitations must be taught or suggested by the prior art. *In re Rokya*, 490 F. 2d 981, 180 USPQ 580 (CCPA 1974). Further, “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006) At a minimum, the cited prior art does not disclose (expressly or inherently) the above recited limitation.

Claim 8 recites:

the vacuum heat insulator of claim 2, wherein through-holes are formed in the thickness direction of the core member, and

wherein, the enveloping member is heated and pressed in portions where the core member is present, and

wherein said heat seal layers are heated and fused over said through-holes and along the shape of said through-holes

The Examiner concedes that the combination of Stroobants and the ‘887 publication are deficient in disclosing a hole through a vacuum insulation product and therefore relies on the ‘686 publication for this disclosure. However the ‘686 reference fails to cure the deficiencies Stroobants and ‘887.

The ‘686 publication does not disclose that the enveloping is heated and pressed in portions where the core member is present and wherein the heat seal layers are fused over the holes and along the shape of the through holes.

In contrast to the instant disclosure as claimed, the ‘686 publication discloses that seal part 24 is welded to each other along the inner periphery of through hole 31 and that the through hole allows a wire or pipe to be inserted. (See Abstract).

As such the '686 publication does not disclose heat seal layers, which are heated and fused over the through hole.

Furthermore, it would not be obvious to one skilled the art to modify the apparatus of the '686 publication by fusing the heat seal layers over the through holes as this would prevent the insertion of a pipe through the hole, which is the desired purpose of the hole in the '686 publication.

Claims 9 and 10 depend from claim 8 and further distinguish the instant invention over the prior art, for example, claim 10 requires that the holes are not formed in the enveloping member in the area of said through-holes of the core members.

As such, these claims are also allowable.

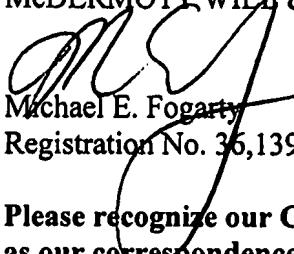
Claim 12 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over publication '887 in view of Stroobants. As discussed above, neither publication '887 nor Stroobants disclose all of the elements of claim 2, either alone or in combination. Claim 12 depends from and further distinguishes claim 2, therefore claim 12 is also allowable over the prior art.

In view of the above remarks, Applicants submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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**Date: October 29, 2006**